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Inventors: Lee Mizzen and Lawrence S.D.
Antony
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IMMUNE RESPONSES USING COMPOSITIONS
CONTAINING STRESS PROTEINS

RELATED APPLICATIONS

12/2/03
This application is a Continuation-in-Part of U.S.
5 Application No. 08/756,621, filed November 26, 1996, ^{now ABN} the
entire teachings of which are incorporated herein by
reference.

BACKGROUND OF THE INVENTION

The viruses causing influenza have been arbitrarily
10 named as influenza type A, B, and C. These types define
antigenically distinct viruses. Each type has several
distinct subtypes. Viruses within one type are genetically
compatible in the sense that cells infected with two
different subtypes can assemble mixed viruses containing
15 components from both subtypes. Influenza viruses are
classified as orthomyxoviruses. The viruses form particles
of between 80 and 120 nm in diameter. Influenza viruses are
enveloped viruses, i.e., their outer surface is derived
from host cell membrane. Inserted in and protruding from
20 the envelope are two major viral-encoded proteins,
hemagglutinin (HA) and neuraminidase (NA). Influenza
viruses are negative-stranded RNA viruses, containing a
genome made up of 8 RNA segments of non-messenger RNA
polarity. The genomic RNA segments are assembled in RNP